

## YEAR 6 HOME LEARNING PACK 11

These tasks are designed to follow the Year Six curriculum as closely as possible.

In addition, we also expect all pupils to read daily, as well as use [TT Rockstars](#) and [Spelling Shed](#) to practise their times tables facts and spellings.

Please e-mail the Year 6 team via Mrs Fogarty-Slack [sfogarty-slack@hvp.org.uk](mailto:sfogarty-slack@hvp.org.uk) with any questions, support needed or to share all your wonderful work during this period of time.

In addition to the tasks we have set, there are several websites the children can access to continue their learning and revision. Please see below.

*N.B. Some of the websites listed are offering free membership for parents/carers during this period of time.*

<http://ww.twinkl.co.uk/offer> enter code: UKTWINKLHELPS

<http://www.spellingframe.co.uk>

<https://www.transum.org/Software/SW/Quickulations/>

<https://www.topmarks.co.uk/maths-games/daily10>

<https://www.morningchallenge.co.uk/home>

<https://kids.classroomsecrets.co.uk/> (see next page).

## YEAR 6 HOMEWORK - ARITHMETIC

Key Stage 2: Arithmetic Paper 3



1  $79 \times 7 =$

1 mark

2  $1067 - 100 =$

1 mark

3  $7.1 + 0.2 =$

1 mark

4  $21 \times 7 =$

1 mark

5  $2687 + 698 =$

1 mark

6  $12 \times 11 =$

1 mark

7  $596 \div 7 =$

1 mark

10  $0.2 + 0.04 =$

1 mark

8  $\frac{7}{q} - \frac{2}{q} =$

1 mark

11  $5^2 \div 2^2 =$

1 mark

9  $232 \times 0 =$

1 mark

12  $2.172 \times 1000 =$

1 mark

## YEAR 6 HOMEWORK - ARITHMETIC

13  =  $8825 + 7061$

1 mark

16  $10 \times 1000 =$

1 mark

14  $\frac{1}{6} + \frac{5}{6} =$

1 mark

17  $307 - 24.7 =$

1 mark

15  $8 \times 800 =$

1 mark

18  $1080 \div 9 =$

1 mark

19 20% of 1800 =

1 mark

22  $20.3 - 12.09 =$

1 mark

20  $6.01 \times 7 =$

1 mark

23  $7045 \div 4 =$

1 mark

21  $90\,000 - 90 =$

1 mark

## YEAR 6 HOMEWORK - ARITHMETIC

24  $57 \times 28 =$

	5	7
x	2	8

2 marks

25  $134\ 905 - 117\ 567 =$

1 mark

26  $\frac{2}{3} \times \frac{1}{3} =$

1 mark

27  $3612 \div 12 =$

3	6	1	2
---	---	---	---

2 marks

28  $\frac{2}{5} \div 2 =$

1 mark

29  $15 \times 1\frac{1}{2} =$

1 mark

30  $1\frac{7}{10} + \frac{2}{3} =$

1 mark

31  $912 \times 67 =$

9	1	2
x	6	7

2 marks

32  $25 \div (12 - 7) =$

1 mark



# YEAR 6 HOMEWORK - ARITHMETIC


33      65% of 360 =

[illegible]

34  $\frac{3}{4} - \frac{1}{5} =$

34

$$\frac{3}{4} - \frac{1}{5} =$$

 1 mark

35	$3034 \div 41 =$
----	------------------

35

$3034 \div 41 =$

2 marks

413034

36	$\frac{1}{5} \div 3 =$
----	------------------------

36

$\frac{1}{5} \div 3 =$

1 mark

# PHASE 4

Hampton Vale  
Primary Academy



## YEAR 6 HOMEWORK - FOCUS SKILL



OAK  
NATIONAL  
ACADEMY

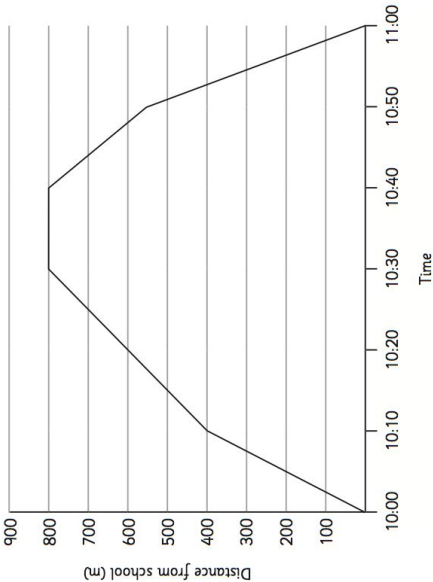
### Online Classroom

Please visit the following Oak National Academy lessons to revise:

<https://www.thenational.academy/online-classroom/year-6/maths#subjects>

YEAR 6 HOMEWORK - Maths

5. Children in a class walk around their local area. The graph shows how far they had travelled from school during the visit.



a) How far were the children from their school at 10:20?

b) For how long are the children at least 500m away from school?

6.

a) Accurately measure these 2 lines.

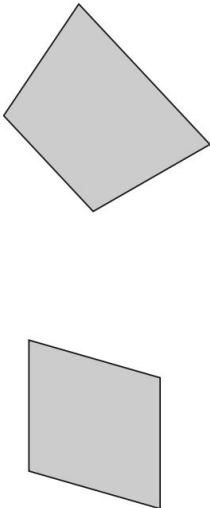
b) Write the difference in size between the 2 lines.

1. Order the following numbers from smallest to largest: 426, 412, 462, 416, 402

--	--	--	--	--	--

smallest largest

2. Draw all the lines of symmetry on these quadrilaterals.



3. Draw lines to match the following calculations to the correct answers.

$56 \times 0$

56

$56 \div 1$

0

$56 \times 1$

4. Write the decimal equivalents to match the following fractions.

$\frac{1}{4} =$

$\frac{1}{2} =$

$\frac{3}{4} =$

## YEAR 6 HOMEWORK - Maths

### Addition and Subtraction Problems

Over the weekend, Nikita spends 85 minutes on her project and 45 minutes on her maths homework.

On Monday, she spends 65 minutes on her spelling and grammar homework.



Explain how you would work out how much longer she spends on her homework over the weekend. Can you find more than one method?

### Addition and Subtraction Problems

#### **Nikita has to solve this problem:**

Mr Green drives a lorry. Last week he drove 197 miles, 232 miles and 164 miles on his 3 journeys.

This week he drove 309 miles and 265 miles on his 2 journeys.

What was the difference in mileage between this week and last week?

Nikita says it is best to find the total of miles for each week first. Discuss with a partner why this is the case, and then solve the problem.



### Addition and Subtraction Problems

Pavel buys a T-shirt for £4.50, a skirt for £7.99 and a pair of shorts. He pays for the items with a £20 note and gets the following coins as change.



Discuss with a partner your answer and compare methods. Can you find a way to solve this using a diagram? How much were the shorts?



## YEAR 6 HOMEWORK - Maths

### S: Column addition

$456 + 321 =$

$32,456 + 6,321 =$

$4,567,789 + 7,989,009 =$

$159 + 451 =$

$7,159 + 24,251 =$

$5,876,230 + 2,745,920 =$

$561 + 768 =$

$8,501 + 33,768 =$

$6,098,021 + 2,000,456 =$

$3,671 + 438 =$

$38,671 + 64,398 =$

$5,678 + 213 =$

$56,078 + 29,213 =$

$9,999 + 1,111 =$

$99,998 + 12,119 =$

$5,439 + 1,298 =$

$35,439 + 12,980 =$

Ext - Can you find  
two 6 digit numbers  
that when added  
together total

**223,456?**

### S: column addition with decimals

$35.6 + 32.1 =$

$324.6 + 93.21 =$

$15.8 + 45.9 =$

$71.59 + 94.1 =$

$46.1 + 96.8 =$

$96.01 + 563.08 =$

$86.71 + 93.8 =$

$38.609 + 64.08 =$

$26.65 + 21.30 =$

$56.078 + 592.17 =$

$99.99 + 88.88 =$

$6799.8 + 1.2119 =$

$54.39 + 82.97 =$

$35.439 + 1.2979 =$

Using the digits 1-8,  
can you complete  
this problem? You  
can only use each  
digit once.

3	8	2	5

## YEAR 6 HOMEWORK - Maths

### S: Column subtraction

$456 - 321 =$

$32,456 - 6,321 =$

$989,009 - 567,789 =$

$759 - 451 =$

$27,159 - 4,251 =$

$876,230 - 745,920 =$

$961 - 768 =$

$88,501 - 33,768 =$

$698,021 - 200,456 =$

$3,671 - 438 =$

$38,671 - 14,398 =$

Ext Using the digits 1-9 once only, create a subtraction sentence where the answer is 3456?

$5,678 - 613 =$

$56,078 - 29,213 =$

$8,989 - 1,212 =$

$99,998 - 12,109 =$

How many can you do?

$5,439 - 1,298 =$

$35,409 - 12,980 =$

### S: Column subtraction with decimals

$35.6 - 32.1 =$

$324.6 - 93.21 =$

$65.8 - 45.9 =$

$71.09 - 64.1 =$

$76.1 - 36.8 =$

$96.01 - 56.08 =$

$86.71 - 73.8 =$

$78.609 - 64.08 =$

$26.65 - 21.30 =$

$56.07 - 52.179 =$

$99.99 - 86.86 =$

$99.8 - 1.219 =$

$94.39 - 82.97 =$

$1.0001 - 0.999 =$

Using the digits 1-8, can you complete this problem? You can only use each digit once.

7	2	8	5



## YEAR 6 HOMEWORK - SKILL PRACTISE

### F: Square numbers

Can you find.....

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225

2 square numbers that add up to 10 ?

2 square numbers that add up to 41 ?

2 square numbers that add up to 130?

3 square numbers that add up to 38?

3 square numbers that add up to 165?

4 square numbers that add up to 114?

4 square numbers that add up to 58?

### Fluency Input: Square number reasoning

Complete the table by putting the labels in the correct place.

**A** Square number      **C** Multiple of 6  
**B** Not a square number      **D** Not a multiple of 6

	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	36 144	6 24 60 18
<b>D</b>	9 16 100 25 49	7 15 31

## YEAR 6 HOMEWORK - SKILL PRACTISE

### S: Adding and subtracting

You have £1000 to spend on the items below. You need to buy as many items as possible without spending more than your budget. How close to £1000 can you get. How much do you have?



£50.00



£355



£229.50



£213.25



£49.67



£16.50



£584



£176.99



£299.99



£130.09

### Reasoning

What is the difference between the sum of all the square numbers less than 101 and the sum of all prime numbers below 21?

$$385 - 77 = 308$$



## YEAR 6 HOMEWORK



<http://play.edshed.com>

All the children have been given accounts for **Spelling Shed** to access at school and at home (**log-in details are stuck inside the children's reading records**). They will be set their weekly spellings using this platform, which they can practice at home ready for their weekly spelling test. We look forward to seeing how they get on with this exciting, new programme.

# Spelling Shed



<https://spellingframe.co.uk/>



## YEAR 6 HOMEWORK - SPELLINGS

### Year 3 and 4 Common Exception Words

<b>Aa</b>	breath	continue	exercise	guard	<b>Kk</b>	naughty	position	recent	<b>Tt</b>
accident	build	<b>Dd</b>	experience	guide	Knowledge	notice	possess	regular	therefore
accidentally	busy	decide	extreme	<b>Hh</b>	<b>Ll</b>	<b>Oo</b>	possession	reign	though
actual	business	describe	<b>Ff</b>	heard	learn	occasion	possible	remember	thought
actually	<b>Cc</b>	different	famous	heart	length	occasionally	potatoes	<b>Ss</b>	through
address	calendar	difficult	favourite	height	library	often	pressure	sentence	<b>Vv</b>
although	caught	disappear	February	history	<b>Mm</b>	opposite	probably	separate	various
answer	centre	<b>Ee</b>	forward	<b>Ii</b>	material	ordinary	promise	special	<b>Ww</b>
appear	century	early	forwards	imagine	medicine	<b>Pp</b>	purpose	straight	weight
arrive	certain	earth	fruit	increase	mention	particular	<b>Qq</b>	strange	woman
<b>Bb</b>	circle	eight	<b>Gg</b>	important	minute	peculiar	quarter	strength	women
believe	complete	eighth	grammar	interest	<b>Nn</b>	perhaps	question	suppose	
bicycle	consider	enough	group	island	natural	popular	<b>Rr</b>	surprise	

### Year 5 and 6 Statutory Spellings

accommodate	cemetery	develop	frequently	mischievous	pronunciation	stomach
accompany	committee	dictionary	government	muscle	queue	sufficient
achieve	communicate	disastrous	guarantee	necessary	recognise	suggest
aggressive	community	embarrass	harass	neighbour	recommend	symbol
amateur	competition	environment	hindrance	nuisance	relevant	system
ancient	conscience	equipment	identity	occupy	restaurant	temperature
apparent	conscious	equipped	immediate	occur	rhyme	thorough
appreciate	controversy	especially	immediately	opportunity	rhythm	twelfth
attached	convenience	exaggerate	individual	parliament	sacrifice	variety
available	correspond	excellent	interfere	persuade	secretary	vegetable
average	criticise	existence	interrupt	physical	shoulder	vehicle
awkward	curiosity	explanation	language	prejudice	signature	yacht
bargain	definite	familiar	leisure	privilege	sincere	
bruise	desperate	foreign	lightning	profession	sincerely	
category	determined	forty	marvellous	programme	soldier	

**Task 1:**  
Practice  
your  
spellings of  
your  
common  
exception  
words in  
your best  
handwriting

**Remember:**  
look, cover,  
write,  
check.

**Task 2:**  
Write 5  
different  
sentences  
using your  
common  
exception  
words.

## YEAR 6 HOMEWORK - GPS

### Skill: Prepositions

Preposition describes the relationship between a noun or a pronoun and another part of the sentence.

WE:

The apple is next to the apple.  
The apple is under the apple.

Prepositions often describe the location of the noun.



### Apply: Prepositions

How many sentences containing prepositional phrases (describing the location of the cats) can you create in 2 minutes?

### WE: Prepositional phrase

The cat is reaching into the fridge.

'into the fridge' = the prepositional phrase

into = preposition



### Apply: Prepositions

Underline the prepositions/prepositional phrases. There are two prepositions in each sentence.

1. They went down the road to the shop.
2. They sped through the forest and swam across a river.
3. David saw a bird perched on a branch outside of his window.
4. My mother left a cake on the table in the kitchen.
5. I raced up and down the hill.
6. I sat next to James and Felix sat behind me.
7. The cat was under the chair and the dog was sleeping in his bed.

Now turn to the next page, to put this skill into action!



## YEAR 6 HOMEWORK - GPS

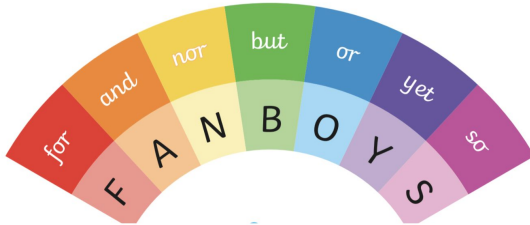
### Skill: Conjunctions

A conjunction is used to join two or more parts of a sentence.

There are two types:

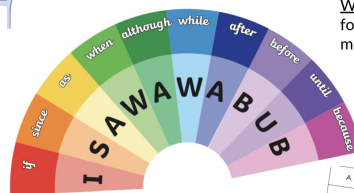
1. Co-ordinating conjunctions
2. Subordinating conjunctions

### Skill: Co-ordinating conjunctions



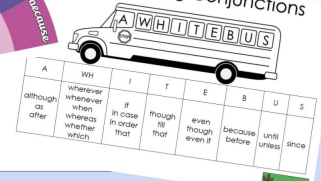
WE: The girls wanted to play football **but** the boys were stood in the way.  
WE: She was so tired **yet** she wanted to go for that long run with Dad.

### Skill: Subordinating conjunctions



WE: The girls wanted to play football **if** only the boys would move out of their way!

Subordinating Conjunctions



WE: **Despite** feeling really tired, she still wanted to go for that long run with Dad.

### Apply: Conjunctions

Select the correct conjunction for each sentence.

1. We went to the zoo at the weekend even though/so it was raining.
2. Jason likes to eat cheese pizza and/but he doesn't like ham pizza.
3. I go to bed when/so my parents tell me.
4. I went to the shop but/so we would have some milk.
5. Bats come out when/but it is dark.
6. I am watching a horror movie even though/however I am scared of them.
7. I will give you some pocket money if/yet you clean your bedroom.
8. I go to work while/because I need to earn money.

★ Label each conjunction as coordinating or subordinating.

Now turn to the next page, to put this skill into action!

## YEAR 6 HOMEWORK - GPS

### Skill: Root words

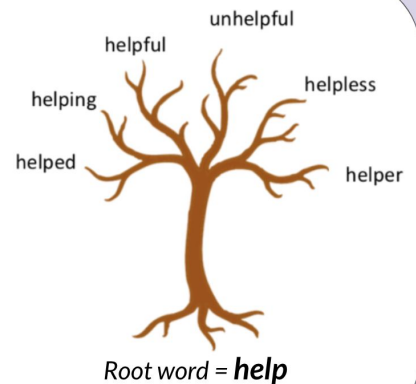
Root words are basic words with no prefix or suffix added to them.

Adding prefixes (letters added to front of word) and suffixes (letters added to the end of a word) can change the meaning of a root word.

### Apply: Root words

You will be given a root word.

Around the root word tree, list at least 6 words which all contain that word as their root word! You can do this by adding prefixes and suffixes.



### Apply: Root words

Around the root word tree, list at least 6 words which all contain that word as their root word! You can do this by adding prefixes and suffixes.



friend



cover



care



act



use

### YEAR 6 HOMEWORK - GPS

#### Using Dialogue

##### Dialogue to convey character

Within dialogue, we learn about a character by what they say, how they say it and by what others say to (or about) them.

“ABC .?!”

First slice of bread = opening speech mark  
Lettuce = capital letter  
Cheese = speech/dialogue/what is being said  
Tomato = closing punctuation  
2nd slice of bread = closing speech mark



#### Apply: Inverted commas

Add the inverted commas into the sentence below to show what is being spoken.

1. Good morning everyone, the teacher said.
2. Where are you going? Joanne asked.
3. I am feeling sad, Katie explained.
4. What are your symptoms? the doctor asked.
5. Help! Sarah shouted.
6. James bellowed, Get out of my room!
7. Sam screamed, Yes!
8. Jamie whispered, We must not talk loudly in the library.

#### Put in the missing punctuation.

#### Apply: Inverted commas

1. How do you get to Luton Chloe asked.
2. Where is my black dress Hannah asked.
3. Get out of my way James exclaimed.
4. Clean this room up immediately Mary bellowed.
5. Stop that this instant the teacher screeched.
6. Why do cats have tails Polly questioned.
7. I love eating fish and chips Harry explained.
8. I am really good at Maths Pauline boasted.

Now turn to the next page, to put this skill into action!

## YEAR 6 HOMEWORK - GPS

### Skill review

Answer each question,  
you can answer in any  
order you wish.

The higher the points,  
the tougher the  
question!

We will mark these  
together afterwards.

<p>1 point □</p> <p>Underline the adjective in this sentence.</p> <p>The witch ran a gnarled finger across the spell book.</p>	<p>3 points ★ □</p> <p>What is the grammatical term given to the underlined word?</p> <p>According to the weather forecast, it will likely be a snow day tomorrow.</p>	<p>4 points ★★★★ □</p> <p>Add an adverb of possibility to the sentence below.</p> <p>We'll be going on holiday this year.</p>	<p>1 point ★ □</p> <p>What is the grammatical term given to the words below?</p> <p>tree rabbit dinosaur</p>
<p>4 points ★★★★ □</p> <p>What is the grammatical term given to the underlined words?</p> <p>Somewhat flustered, the pet shop owner finally caught the escapee hamster.</p>	<p>2 points ★★ □</p> <p>What type of conjunction is underlined?</p> <p>Frank checked for monsters before going to bed.</p>	<p>1 point ★ □</p> <p>Add an adverb into this sentence.</p> <p>The sheep jumped over the fence.</p>	<p>3 points ★★★ □</p> <p>Underline the modal verb in this sentence.</p> <p>Although I like my own painting, I think I might prefer yours.</p>
<p>3 points ★★★ □</p> <p>Circle the three pronouns in this sentence.</p> <p>She couldn't wait for him to meet them.</p>	<p>1 point ★ □</p> <p>Add in a suitable preposition.</p> <p>Your eyebrows are _____ your eyes.</p>	<p>4 points ★★★★ □</p> <p>Write a sentence using the word 'drive' as a noun.</p>	<p>2 points ★★ □</p> <p>What kind of phrase is underlined in this sentence?</p> <p>After the football match, we all celebrated.</p>
<p>2 points ★★ □</p> <p>a or an?</p> <p>_____ umbrella</p> <p>_____ delicious apple</p>	<p>3 points ★★★ □</p> <p>Underline the subject in this sentence.</p> <p>Incredibly, the missing ring was found by a dog.</p>	<p>2 points ★★ □</p> <p>Add a suitable co-ordinating conjunction to the sentence below.</p> <p>I love apples _____ I do not like apple pies.</p>	<p>4 points ★★★★ □</p> <p>Circle the three determiners in this sentence.</p> <p>My gran said we could make some biscuits for the fete.</p>

### Skill review - Spellings

<https://www.arcademics.com/games/coconuts>

<https://spellingframe.co.uk/>

<http://www.ictgames.com/mobilePage/spookySpellings/index.html>

## YEAR 6 HOMEWORK - Writing

### Sentence type: Emotion first

- An emotion word at the beginning of the sentence gives more emphasis to the feeling, it is followed by a comma then a main clause about the person feeling that emotion. Usually describing what they are doing that shows the emotion.

WE: Heartbroken, the lonely old man sobbed silently as he said a last goodbye to his oldest friend.

WE: Terrified, he froze instantly.



C:

,

C:

,



## YEAR 6 HOMEWORK - Writing



1:

,

1:



1:

,

1:

## YEAR 6 HOMEWORK - Writing

### 3A: Three adjectives as a list to describe a noun.

- This sentence begins with 3 adjectives, separated by a comma describing the subject of the sentence.

WE: Wet, cold, tired, Eve's bloodshot eyes squinted at the sodden bus timetable in her quivering hands.

WE: Twirling, dancing, laughing, the girls couldn't remember the last time they'd had this much fun.

★ Which are the main (independent) and which are the subordinate (dependent) clauses?



WE:

## YEAR 6 HOMEWORK - Writing



l:

l:



l:

l:

## YEAR 6 HOMEWORK - Writing

### Story starter

The storm had been raging for hours. Like a besieging army tormenting an enemy's ramparts, the waves battered on the lighthouse walls.

A group of men huddled in one of the cylindrical shaped rooms, flinching every time a wave rocked the lighthouse. Their hearts were in their mouths with every devastating blow: they half expected the walls to come tumbling down at any moment.

They turned their heads and listened to the sound of the storm. What they heard was truly terrifying...



### Question time!

- Can you describe what it feels like to be caught in a storm?
- What do you think the men heard when they listened to the storm?
- Who might the men in the lighthouse be?
- Why are they huddled together?
- What is the purpose of a lighthouse?
- What would happen if there were no lighthouses in the world?
- How do you think someone first invented lighthouses?
- Can you think of an alternative way to guide ships?
- Do modern lighthouses require people to work inside them?

Imagine you are caught in this storm. You are convinced you will not live through the night and want to write a letter of 'last words' to someone you love.

### Success criteria

- ✓ abstract nouns, emotive phrases
- ✓ informal language
- ✓ parenthesis to add extra information
- ✓ adverbials to add detail
- ★ Dramatic dash –
- ★ Semi-colon
- ★ Language from 'Letters from the Lighthouse'



## YEAR 6 HOMEWORK - Writing



Handwriting practice lines consisting of 10 rows of three horizontal lines each (top, middle, and bottom lines).



## YEAR 6 HOMEWORK - Writing

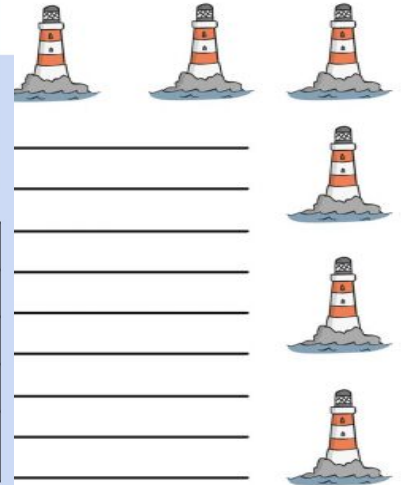
### Apply: Slow Writing

#### Independent:

They were a bit frightened. They could hear the storm outside.



Step 1	Start with a fronted adverbial.
Step 2	Change the modifier.
Step 3	Add in a subordinate clause after 'frightened'.
Step 4	Pop in an 'As -ly' sentence.
Step 5	Change the final sentence ' <i>They could...</i> ' to include personification, a simile or a metaphor.





The waves hit the lighthouse. Some men were inside. They were a bit frightened. They could hear the storm outside.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## YEAR 6 HOMEWORK - Writing

Edit these sentences for correct spelling, grammar and punctuation.

"may i possibly request that you overmain at home too recieve my post, asker Brenda, tho its understandable iv you do'nt got enuff time this mourning?"

Jim was caucious an obzervent as he carrying the incredibly speshul and ainshent artefact throo the crowd by the churchs' alter.

dashing two reenter the restrant and unvoid the queueu, fred was embarrassid as him distaked witch (table was him's sisters)?

Find the 6 errors in the text below

It's all rather complicated, but human minds are far to simple to comprehend how these beings look, talk or travel. Perhaps it's best if you just envisij two green creatures whizzing around in a flying saucer, or your head might implode. One thing is true, however: they really were in peril of being late for supper.

Nipping between the fifth and sixth dimensions (so much quicker then crawling along through space and time), Beth popped the craft into a solar system that Alan had never visited before. The veercle skidded between two large planets – one with attractiv but otherwise unexceptional ice rings; the other with too many moons for its own good – and Beth slammed on the retro-boosters. There before them loomed a greeny-blue planet, swathed in water vapour.



# YEAR 6 HOMEWORK - Reading

## Alan Turing

Alan Turing was an English computer scientist, mathematician and **cryptanalyst**. He is thought to be one of the inventors of modern computing and he is best known for his important role in cracking German codes during the Second World War.

### Early Life

Alan Mathison Turing was born on 23<sup>rd</sup> June, 1912 in Maida Vale, London. His father, Julius, worked for the Indian Civil Service. His mother, Ethel, was the daughter of the chief engineer of the Madras Railway in southern India. Due to Julius's job, Julius and Ethel spent a vast amount of time travelling between their homes in Hastings (in England) and India. Wishing for their children to be brought up in Britain, Julius and Ethel made the decision that Alan and his older brother, John, would not travel to India with them. Instead, while they were in India, the boys would stay with friends of the family.

### Childhood Genius

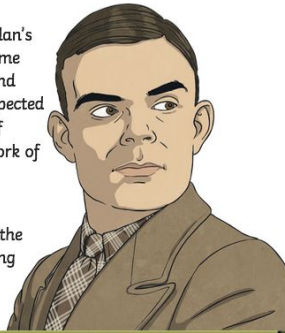
From a very early age, Alan began to show signs of his intelligence, and stories about his childhood clearly show a boy who enjoyed puzzles and challenges. One story tells that Alan traced the path of flying bees, in order to work out where their hive was and find honey for his family.

Alan's intelligence was also recognised by his teachers. At the age of 13, Alan joined Sherborne School: a **boarding school** in the county of Dorset. Alan was so determined to attend school on his first day at Sherborne that he rode his bicycle for over 60 miles and slept overnight at an inn, all without any help from an adult.

It was while at Sherborne School that Alan's ability in mathematics and science became clear. Alan was able to solve problems and understand theories far beyond those expected for a child of his age. At only 16 years of age, Alan was able to understand the work of **Albert Einstein**.

### Bletchley Park

Alan was 27 years of age at the start of the Second World War and had been working part time at Bletchley Park with the



## Alan Turing

Government Code and Cypher School, known as the GC&CS. Bletchley Park was a **stately home** at which all codebreakers worked during the war.

During the war, the Germans believed that **encrypting** their messages would stop their enemies from reading them. The Germans used a clever system which involved replacing one letter with another several times. By keeping a log of what changes had been made (called a key), German soldiers could still read the original message, even though the final outcome did not appear to make any sense.

However, a machine called the Enigma had been invented by Polish codebreakers during the First World War. In 1939, the Polish codebreakers shared their machine with British and French codebreakers. The Enigma machine tried to change the final outcome back into the original message that was sent. This would help Britain and France to learn the Germans' secrets and outsmart them in the war.

Working alongside senior codebreaker Dilly Knox, Alan and a team of **cryptanalysts** tried to use the Enigma machine to break the German code. Within weeks of starting work at Bletchley Park, Alan had created a new machine - 'the bombe' - which was far better at cracking codes than the Enigma machine had been. Alan's new machine became one of the most important tools used to read German messages and it played a huge part in ending the Second World War.

For his services during the war, Alan was awarded an OBE (Officer of the Order of the British Empire) by King George VI in 1946.

### Glossary

**Albert Einstein:** A scientist and philosopher who is credited with making some of the greatest scientific discoveries in recent history.

**boarding school:** A school at which the students also live, as well as learn.

**cryptanalyst:** Somebody who is able to break coded messages without being told the key.

**encrypting:** Turning something into code.

**stately home:** A large and impressive house that is or was lived in by a rich family.

Now answer the questions  
on the next pages.

## YEAR 6 HOMEWORK - Reading

1. What was the name of the senior codebreaker that Alan worked alongside at Bletchley Park? Tick **one**.

- ☐ Albert Einstein
- ☐ John Sherborne
- ☐ Dilly Knox
- ☐ Julius Hastings

2. **During the war, the Germans believed that encrypting their messages...**  
What does encrypting mean? Tick **one**.

- ☐ destroying something
- ☐ turning something into code
- ☐ transmitting a message
- ☐ outsourcing work to someone

3. List three members of Alan Turing's family.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

4. **Alan and a team of cryptanalysts tried to use the Enigma machine...**

Give another word which the author could have used instead of **cryptanalysts**.

\_\_\_\_\_

5. At what age did Alan enrol at Sherborne School?

\_\_\_\_\_

6. According to stories, why did Alan trace the path of flying bees?

\_\_\_\_\_  
\_\_\_\_\_

7. What was unusual about Alan's first journey to Sherborne School?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Why do you think Polish codebreakers shared their invention with the British and French?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Summarise what you have read in the section entitled 'Childhood Genius' in 20 words or fewer.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## YEAR 6 HOMEWORK - Reading

### Leisure

What is this life if, full of care,  
We have no time to stand and stare.

No time to stand beneath the boughs  
And stare as long as sheep or cows.

No time to see, when woods we pass,  
Where squirrels hide their nuts in grass.

No time to see, in broad daylight,  
Streams full of stars, like skies at night.

No time to turn at Beauty's glance,  
And watch her feet, how they can dance.

No time to wait till her mouth can  
Enrich that smile her eyes began.

A poor life this if, full of care,  
We have no time to stand and stare.

By William Henry Davies (1871-1940)



## YEAR 6 HOMEWORK - Reading

19. Find and copy a phrase which could mean 'too occupied with worry'.

20. Look at the line 'No time to turn at Beauty's glance'

Why is a capital letter used for the word 'Beauty'?

15. Which three animals are mentioned in the poem?

16. What is the meaning of the word 'boughs'? Tick one.

- stars in the sky ☐ blades of grass ☐  
branches of a tree ☐ streams of water ☐

17. Several lines start with the repeated phrase 'No time'.

What is the purpose of repeating these words?

18. What do you think the author means by 'streams full of stars'?

23. The title of the poem is 'Leisure'. How does the word 'leisure' link to the theme of the poem? Use evidence from the text to support your answer.



## YEAR 6 HOMEWORK - Reading

### Reading Challenge



1

Find the **adjectives** in this text and make a list. Now think of 5 sentences using atleast 3 adjectives in each sentence.



2

Find 5 **common nouns** and then find 10 **proper nouns**.



3

Look at the apostrophes in this text. Write down the words that have one and then explain why it is used there.



4

Find the meanings of the words you haven't heard of before. Now write a few sentences using those words.



5

Have you learnt any **facts** from reading this piece of non-fiction text? Write those facts down.



6

How does the story make you want to keep reading? Write down the phrases and words that you find effective in **gripping** the reader.



7

Search for a descriptive word in your text. Now use a thesaurus and write down five **synonyms** and **antonyms** for that word.

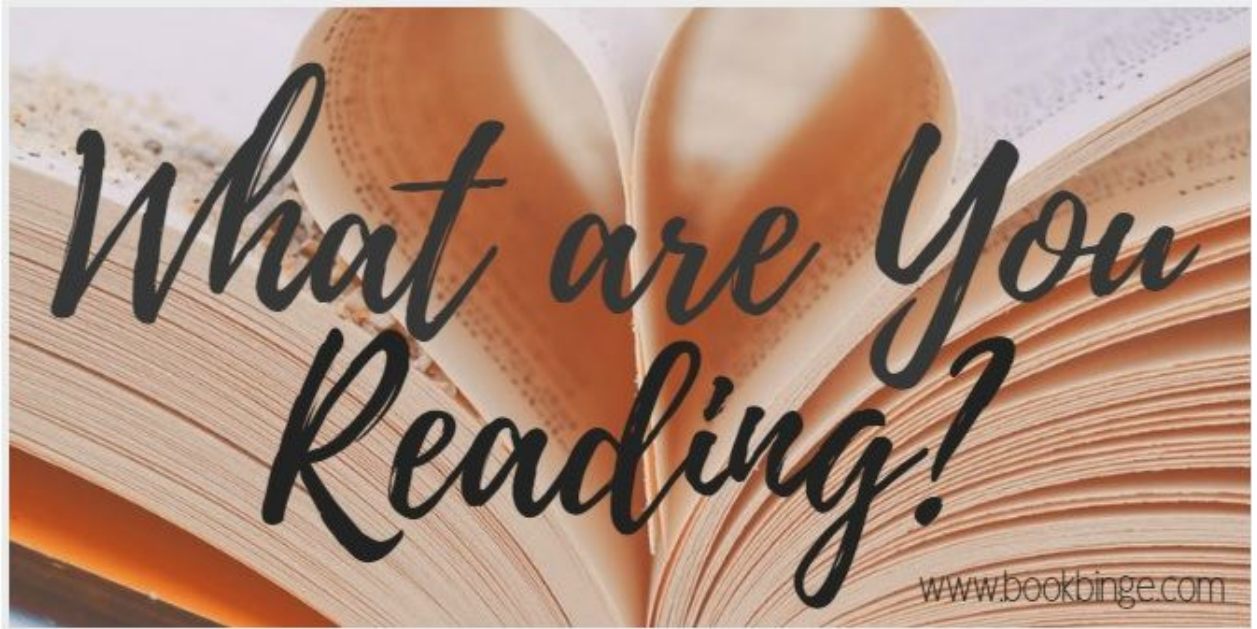


8

Read through a chapter and pick out the **powerful words** that you can use in your own writing for the future.



## YEAR 6 HOMEWORK - Reading

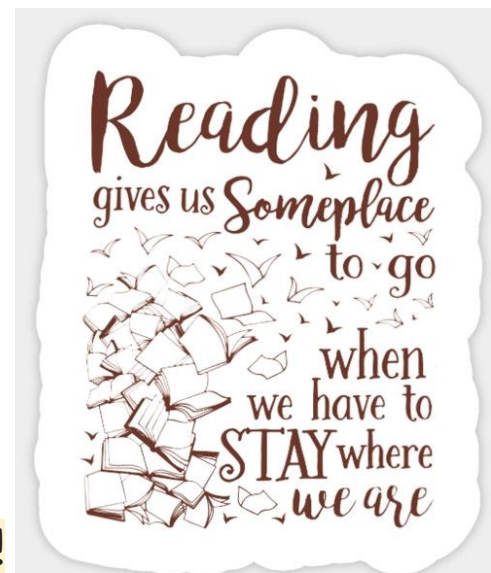


Share with your teacher a review of the book you are currently reading. You can present this in any way you like! Possible ideas might include a written review, a poster, a video or a story-map of the events so far.

Be sure to include:

- The title and author
- A brief summary of the events so far
- A description of the book's protagonist or other key character
- Your opinion of the book
- A prediction of what may happen next

E-mail us your review!

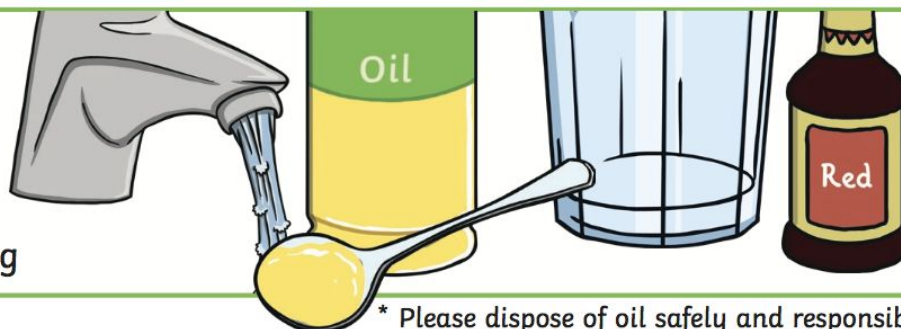


## YEAR 6 HOMEWORK - Science

### Fireworks in a Glass

#### You Will Need

- Warm Water
- Oil\*
- A Tall Glass
- Food Colouring



\* Please dispose of oil safely and responsibly.

This is a very cool, simple and fun experiment, and also completely safe, just don't drink the water!

#### Method

- 1 Fill the tall glass with warm water.
- 2 Pour a small amount of oil into another container and add a few drops of food colouring.
- 3 Give it a good stir, if it doesn't mix, add a bit of water.
- 4 Pour the food colouring and oil mixture into the warm water and watch the fireworks!

#### The Science Bit

Oil and water don't mix. Also oil is less dense than water (meaning there is less of it in the same volume) and therefore floats on top of water in a nice layer. The food colouring we used was water based and therefore does not mix with the oil, instead it sinks through the oil into the water below. Since the addition of the colouring makes the food colouring heavier than the water, it sinks to the bottom leaving trails (resembling fireworks) as some of the colour diffuses into the water.



## YEAR 6 HOMEWORK

### Emoji Code Breaking

5	2	7	3	4	9	6	8	0	1

$$\text{Smiling Face with Smiling Eyes} + \text{Thinking Face} + \text{Cat} + \text{Smiling Face with Heart Eyes} + \text{Frowning Face} + \text{Woman with Pink Hair and Open Mouth} + \text{Mouse} + \text{Frowning Face} = 9725$$

- $$\text{Grinning Face with Big Eyes} + \text{Smiling Face with Smiling Eyes} + \text{Thinking Face} + \text{Mouse} + \text{Frowning Face} + \text{Cat} + \text{Frowning Face with Sweat Drop} + \text{Smiling Face with Heart Eyes} =$$
- $$\text{Blue Face with Sweat Drop} + \text{Woman with Pink Hair and Open Mouth} + \text{Smiling Face with Heart Eyes} + \text{Smiling Face with Smiling Eyes} - \text{Mouse} + \text{Thinking Face} + \text{Cat} + \text{Thinking Face} =$$
- $$\text{Cat} + \text{Mouse} + \text{Smiling Face with Heart Eyes} + \text{Frowning Face} - \text{Blue Face with Sweat Drop} + \text{Frowning Face with Sweat Drop} + \text{Smiling Face with Smiling Eyes} + \text{Thinking Face} =$$
- $$\text{Smiling Face with Smiling Eyes} + \text{Smiling Face with Heart Eyes} + \text{Woman with Pink Hair and Open Mouth} + \text{Cat} + \text{Grinning Face with Big Eyes} + \text{Frowning Face} + \text{Grinning Face with Big Eyes} + \text{Woman with Pink Hair and Open Mouth} =$$
- $$\text{Cat} + \text{Mouse} + \text{Woman with Pink Hair and Open Mouth} + \text{Grinning Face with Big Eyes} + \text{Cat} + \text{Blue Face with Sweat Drop} + \text{Mouse} + \text{Thinking Face} =$$
- $$\text{Blue Face with Sweat Drop} + \text{Frowning Face with Sweat Drop} + \text{Thinking Face} + \text{Smiling Face with Heart Eyes} - \text{Woman with Pink Hair and Open Mouth} + \text{Blue Face with Sweat Drop} + \text{Smiling Face with Smiling Eyes} + \text{Frowning Face} =$$
- $$\text{Smiling Face with Heart Eyes} + \text{Cat} + \text{Smiling Face with Smiling Eyes} + \text{Woman with Pink Hair and Open Mouth} + \text{Grinning Face with Big Eyes} + \text{Cat} + \text{Thinking Face} + \text{Grinning Face with Big Eyes} =$$
- $$\text{Frowning Face with Sweat Drop} + \text{Thinking Face} + \text{Frowning Face} + \text{Mouse} - \text{Mouse} + \text{Blue Face with Sweat Drop} + \text{Grinning Face with Big Eyes} + \text{Smiling Face with Heart Eyes} =$$
- $$\text{Woman with Pink Hair and Open Mouth} + \text{Smiling Face with Heart Eyes} + \text{Grinning Face with Big Eyes} + \text{Cat} + \text{Mouse} + \text{Thinking Face} + \text{Woman with Pink Hair and Open Mouth} + \text{Thinking Face} =$$
- $$\text{Frowning Face} + \text{Frowning Face with Sweat Drop} + \text{Cat} + \text{Thinking Face} - \text{Smiling Face with Heart Eyes} + \text{Blue Face with Sweat Drop} + \text{Frowning Face} =$$



## YEAR 6 HOMEWORK

### Spelling List Wordsearch Double Consonant

p	r	o	f	e	s	s	i	o	n	c	c
e	s	r	x	p	t	n	x	o	t	o	q
m	e	t	e	j	e	a	y	n	h	r	e
b	f	x	f	c	w	a	e	i	y	r	s
a	f	c	a	z	o	i	x	h	p	e	p
r	t	w	h	g	c	m	n	w	e	s	e
r	d	y	g	i	g	e	m	o	k	p	c
a	b	x	f	x	w	e	j	e	v	o	i
s	s	f	k	k	y	i	r	v	n	n	a
s	u	l	a	a	p	x	o	a	e	d	l
s	w	v	y	b	d	m	f	k	t	i	l
c	o	m	m	u	n	i	c	a	t	e	y

embarrass  
especially  
correspond  
communicate

profession  
sufficient  
exaggerate  
recommend

## YEAR 6 HOMEWORK - PSHE

Write down a memory  
that makes you smile



### Emotions

<https://www.youtube.com/watch?v=dOkYKyVFnsS>



Are all emotions helpful and appropriate?

Why do you think it's possible to experience them all?

Which emotion have you felt most recently? Why do you think that is?

Lockdown has affected many people's emotions, why do you think this is?

I want you to draw on your own experiences of your joy, anger, worried, sad and disgusted emotions.

Firstly, I would like you to write on your whiteboards a time you have felt each emotion, anything that springs to your mind.

Next, you are going to draw an image that you think represents that feeling - anything at all.

Finally, share your images and memories with the class, if you feel comfortable doing so.

## YEAR 6 HOMEWORK - PSHE

Yesterday we discussed emotions, today we are going to continue this discussion but focus on how we can recognise our emotions and how we can recognise other people's emotions.

Our reactions to our own and others emotions are very important.

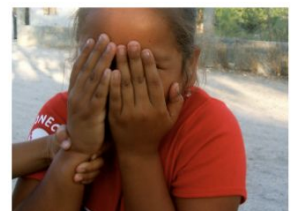


Emotional health is just as important as physical health, we just tend not to talk about it as much. Recognising our emotions and finding ways to keep them balanced is part of making sure you stay emotionally healthy.

There are eight universally recognised emotions (although some debate there are many, many more!) We discussed a few yesterday but today we are going to discuss them all.



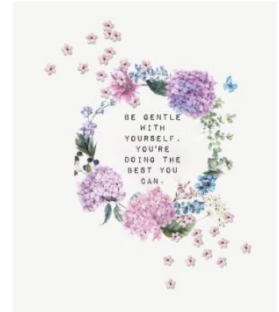
For each of the images below, you must figure out which emotion they are feeling.



How do you know?

## YEAR 6 HOMEWORK - PSHE

Why are these inspiring?



You are now going to create a quote and design it in a way that can be a reflection for everyone during these challenging times - something that reminds them it's okay not to be okay!

Write it on your whiteboards first, then when you are happy with it you can create a postcard for a family member or friend





[illegible]



## YEAR 6 HOMEWORK - PHSE



What emotion or feeling would you link to these paintings and why?



## YEAR 6 HOMEWORK



# duolingo

## Learn a language – for free!

Create a free account on [www.duolingo.com](https://www.duolingo.com)  
and start learning any language, all for free!



Learn a language for free. Forever.

GET STARTED

I ALREADY HAVE AN ACCOUNT

## WELLBEING



tiny POSITIVES  
or little things that  
COUNT today...

- \*
- \*
- \*
- \*
- \*
- \*

The worksheet features a yellow background with orange stars and sunburst patterns. The text is written in a casual, handwritten style. The list of six items is preceded by asterisks.

## WELLBEING

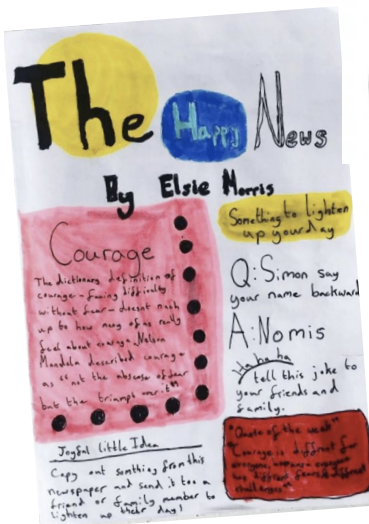
# THE HAPPY NEWS

By EMILY COXHEAD®

A NEWSPAPER TO CELEBRATE ALL THAT'S GOOD IN THE WORLD...  
THE HAPPY NEWSPAPER IS A PLATFORM TO SHARE POSITIVE NEWS AND WONDERFUL PEOPLE

The Happy News is a fabulous resource to access during these difficult and uncertain times, as it shares uplifting, positive new stories from around the world.

The template on the next page can be used to report and illustrate your own positive news stories – have a look at some ideas below. Enjoy!



MAKE  
SOMEONE  
HAPPY



hello sunshine

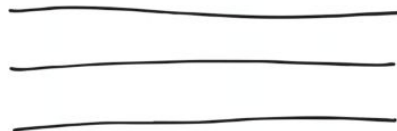
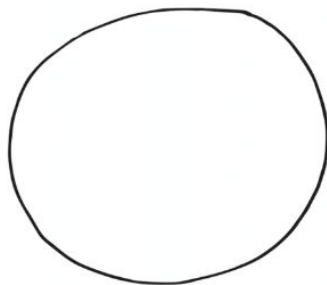
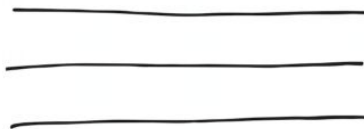
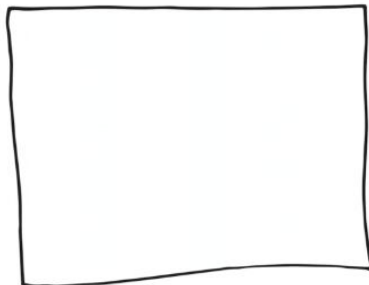
## WELLBEING

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Edited by: \_\_\_\_\_



Can you find some happy news stories and write/draw them above?



# Year 6 End Of Year Expectations - Writing

## Working towards the expected standard

The pupil can:

- write for a range of purposes
- use paragraphs to organise ideas
- in narratives, describe settings and characters
- in non-narrative writing, use simple devices to structure the writing and support the reader (e.g. headings, sub-headings, bullet points)
- use capital letters, full stops, question marks, commas for lists and apostrophes for contraction mostly correctly
- spell correctly most words from the year 3 / year 4 spelling list, and some words from the year 5 / year 6 spelling list\*
- write legibly.<sup>1</sup>

## Working at the expected standard

The pupil can:

- write effectively for a range of purposes and audiences, selecting language that shows good awareness of the reader (e.g. the use of the first person in a diary; direct address in instructions and persuasive writing)
- in narratives, describe settings, characters and atmosphere
- integrate dialogue in narratives to convey character and advance the action
- select vocabulary and grammatical structures that reflect what the writing requires, doing this mostly appropriately (e.g. using contracted forms in dialogues in narrative; using passive verbs to affect how information is presented; using modal verbs to suggest degrees of possibility)
- use a range of devices to build cohesion (e.g. conjunctions, adverbials of time and place, pronouns, synonyms) within and across paragraphs
- use verb tenses consistently and correctly throughout their writing
- use the range of punctuation taught at key stage 2 mostly correctly<sup>^</sup> (e.g. inverted commas and other punctuation to indicate direct speech)
- spell correctly most words from the year 5 / year 6 spelling list,<sup>\*</sup> and use a dictionary to check the spelling of uncommon or more ambitious vocabulary
- maintain legibility in joined handwriting when writing at speed.<sup>2</sup>

## Working at greater depth

The pupil can:

- write effectively for a range of purposes and audiences, selecting the appropriate form and drawing independently on what they have read as models for their own writing (e.g. literary language, characterisation, structure)
- distinguish between the language of speech and writing<sup>3</sup> and choose the appropriate register
- exercise an assured and conscious control over levels of formality, particularly through manipulating grammar and vocabulary to achieve this
- use the range of punctuation taught at key stage 2 correctly (e.g. semi-colons, dashes, colons, hyphens) and, when necessary, use such punctuation precisely to enhance meaning and avoid ambiguity.<sup>^</sup>

[There are no additional statements for spelling or handwriting]

# Year 6 End Of Year Expectations - Maths

## Working at the expected standard

- The pupil can demonstrate an understanding of place value, including large numbers and decimals  
(e.g. what is the value of the '7' in 276,541?;  
find the difference between the largest and smallest whole numbers that can be made from using three digits;  
 $8.09 = 8 + \frac{9}{100}$ ;  
 $28.13 = 28 + \square + 0.03$ ).
- The pupil can calculate mentally, using efficient strategies such as manipulating expressions using commutative and distributive properties to simplify the calculation  
(e.g.  $53 - 82 + 47 = 53 + 47 - 82 = 100 - 82 = 18$ ;  
 $20 \times 7 \times 5 = 20 \times 5 \times 7 = 100 \times 7 = 700$ ;  
 $53 \div 7 + 3 \div 7 = (53 + 3) \div 7 = 56 \div 7 = 8$ ).
- The pupil can use formal methods to solve multi-step problems  
(e.g. find the change from £20 for three items that cost £1.24, £7.92 and £2.55;  
a roll of material is 6m long: how much is left when 5 pieces of 1.15m are cut from the roll?;  
a bottle of drink is 1.5 litres, how many cups of 175ml can be filled from the bottle, and how much drink is left?).
- The pupil can recognise the relationship between fractions, decimals and percentages and can express them as equivalent quantities  
(e.g. one piece of cake that has been cut into 5 equal slices can be expressed as  $\frac{1}{5}$  or 0.2 or 20% of the whole cake).
- The pupil can calculate using fractions, decimals or percentages  
(e.g. knowing that 7 divided by 21 is the same as  $\frac{7}{21}$  and that this is equal to  $\frac{1}{3}$ ;  
15% of 60;  
 $1\frac{1}{2} + \frac{3}{4}$ ;  $\frac{7}{9}$  of 108;  
 $0.8 \times 70$ ).
- The pupil can substitute values into a simple formula to solve problems  
(e.g. perimeter of a rectangle or area of a triangle).
- The pupil can calculate with measures  
(e.g. calculate length of a bus journey given start and end times; convert 0.05km into m and then into cm).
- The pupil can use mathematical reasoning to find missing angles  
(e.g. the missing angle in an isosceles triangle when one of the angles is given;  
the missing angle in a more complex diagram using knowledge about angles at a point and vertically opposite angles).